



**MATERNAL AND CHILD HEALTH BUREAU**  
**PORTFOLIO OF ACTIVE RESEARCH PROJECTS**  
**FY 1998 B FY 1999**

**September 8, 1999**

## **Preface**

**This document lists the Maternal and Child Health Bureau (MCHB) research projects active in Fiscal Years 1998 and 1999 by new/continuation status, project number, and amount of funds granted. It also contains for each of the projects listed a descriptive summary of the research plan on record and the name and address of the principal investigator. The document is intended to serve many purposes, but principally that of responding to within-Bureau requests for information on specific types of research (i.e., managed care). If the need arises for more detailed information on a particular project or groups of projects listed in this document, please contact the MCHB Research Program at (301) 443-2190.**

## **NEW-FY 98**

**1. R40 MC 00126. Welfare Reform and the Perinatal Health of Immigrants**, a four-year study at the SUNY Health Science Center at Brooklyn, proposes to assess the impact of new Federal welfare legislation on the health of immigrant mothers and their infants in two states - New York and California. The new legislation places new restrictions on access to Medicaid. The study will assess the relationship between the new Federal legislation, the differing means by which it is applied and the health of immigrant women and their newborns. The study involves three integrated sub-studies. Study I will consist of cohort analysis of women at sentinel hospitals at the two study sites. Study II will use state vital statistics data to assess perinatal outcome data. Both Study I and II will employ a before-and-after design. Study III will consist of a qualitative legislative analysis (which includes analysis of operational implementation guidelines to be enforced in each state), interview with state officials, and interviews with the CEO's/CFO's of the sentinel hospitals. It is expected that through such investigations it will be possible to design health care delivery systems that will optimize clinical outcomes for immigrant mothers and children. It will also provide information for health care providers who are interested in how welfare reform impacts on the mothers and children they serve.

**Principal Investigator:** Howard L. Minkoff, M.D., Professor, Department of Obstetrics and Gynecology, SUNY Health Science Center at Brooklyn, 450 Clarkson Avenue, Box 24, Brooklyn, NY 11203. Telephone: (718) 283-7048; Fax: (718) 270-4173.

Email: [hminkoff@netmail.hscbklyn.edu](mailto:hminkoff@netmail.hscbklyn.edu). **FY 98: \$ 307,244; FY 99: \$426,685**

**2. RO40 MC 00117. Life Around Newborn Discharge**, a three-year investigation, proposes to investigate the circumstances and the decisions that led the mother-infant pair be discharged post delivery and the effects of these circumstances and decisions on subsequent mother and infant health. The researcher suggest that little is known about the short-term adaptation of both mothers and infants under a variety of discharge conditions, and that such research is required to document the circumstances for which successful adaptation is likely. There are two primary and three secondary aims to the study. The first primary aim is to examine the patterns of postpartum discharge in relation to both mother's perception of readiness and the clinician's judgements about the suitability of discharge of both the mother and the infant, including the plans for outpatient follow-up. A second primary goal is to examine the relationships between aptness of discharge timing and subsequent maternal and infant health during the first month postpartum. Secondary goals include assessing the degree of agreement between mother and clinician regarding the timing of the discharge and its effects on health care outcomes, how that agreement may change retrospectively after discharge, and to obtain descriptive information via maternal diaries on the issues facing mothers in the first two weeks postpartum.

**Principal Investigator:** Henry H. Bernstein, D.O., Director of Primary Care, Children's Hospital Pediatric Associates, Hunnewell Ground, 300 Longwood Avenue, Boston, MA 02115. Phone: (617) 355-7701; Fax: (617) 739-5458. Email: [bernstein\\_h@al.tch.harvard.edu](mailto:bernstein_h@al.tch.harvard.edu). **FY 98: \$556,563; FY 99: 648,928**

**3. RO40 MC 00115. Maternal Health and Pregnancy Outcomes Among Hispanics**, this study requests three years of support to conduct a prospective, community-based study of a cohort of 700 Hispanic ( 86% Mexican-American ) pregnant women and their infants in southwest Detroit. Low birth weight is rare among Hispanic infants, despite the substantial proportion of mothers who live in poverty and receive inadequate prenatal care. Given the nation's focus on low birth weight as a major public health indicator of maternal and neonatal health, this "better outcome" has reduced health policy and program attention to Hispanic mothers and infants. This appears to be the case despite the fact that Hispanic women of childbearing ages have substantial greater incidence of obesity, impaired glucose tolerance and diabetes, and that these conditions are associated with maternal labor and delivery complications, cesarean section and diabetes after pregnancy, and with fetal overgrowth, birth injuries, obesity and metabolic abnormalities in subsequent life among gestationally exposed infants. Study variables will be derived from maternal anthropometry and metabolic assays of blood samples collected for the study during prenatal care, along with prenatal, obstetric and newborn medical records. The proposed research is expected to contribute to understanding the interactions between maternal and infant status, including the consequences of processes affecting fetal growth. Study results should be applicable to designing appropriate prenatal screening and treatment strategies that will improve quality of care and ultimately maternal and infant outcomes.

**Principal Investigator:** Edith Chana Kieffer, Ph.D., Assistant Professor, School of Public Health, The University of Michigan, 1420 Washington Heights, Ann Arbor, MI 48109-2029. Phone: (734) 763-7379; Fax: (734) 647-2739. Email: [ehieffer@umich.edu](mailto:ehieffer@umich.edu). **FY 98: \$172,079; FY-99: \$196,861**

**4. R40 MC 00113-01. Bio-markers of Infection and Risk of Pre-term Delivery.** This study requests three years of support to conduct a study that seeks to investigate the relationship between maternal serum ferritin (SF) levels and amniotic fluid (AF) interleukin-6 (IL-6) levels in the second trimester, both to each other and to subsequent risk of preterm delivery (PTD). Recent work suggests that biomarkers such as SF and AF IL-6 may be valuable as predictors of PTD. Elevated IL-6 in amniotic fluid during the second trimester has been associated with increased risk of preterm delivery among women who have had a genetic amniocentesis. The elevated IL-6 levels may be due to sub-clinical intrauterine infection that may precipitate preterm delivery. There has also been work noting a positive association between maternal SF concentration measured during the second and third trimester and risk of preterm delivery. A cohort of 6,754 pregnant women who received prenatal care, provided a second trimester SF and AF sample during the period from 1/1/94 to 12/31/96 and delivered a singleton infant at Swedish Medical Center, Seattle, WA will be the basis of this prospective nested case-control study.

**Principal Investigator:** Michelle A. Williams, Sc. D., Associate Professor, Center for Perinatal Studies, Swedish Medical Center, 7476 Broadway, Seattle, WA 98122-4307. Phone: (206) 386-3107; Fax: (206) 386-3173. Email: [mwilliam@u.washington.edu](mailto:mwilliam@u.washington.edu). **FY 98: \$201,348; FY 99: \$202,188**

**5. RO40 MC 00123. Evaluation of Hawaii's Healthy Start Program. Phase II-Fatherhood Component**, a two-year study at the Johns Hopkins School of Medicine, will assess the effectiveness of early home visitation in promoting effective parenting by fathers, via expanded continuation of an ongoing 5-year randomized trial (RCT) of Hawaii's Healthy Start Program (HSP). The HSP model is the most widely replicated early home visitation program for environmentally at-risk families. It comprises (1) community-based screening to identify at-risk families of newborns and (2) intensive, long-term home visiting by trained paraprofessionals whose direct services and linkage to community resources aim to promote healthy family functioning and maximize child health, development and school readiness. Phase II aims: (1) To expand Year 3 data collection in three ways: (a) Expand process data collection to measure paternal engagement in the HSP, (b) Initiate paternal interviews to measure directly fathers' parenting behavior and other aspects of functioning, (c) Expand maternal interviews to measure maternal perceptions of the father's parenting attributes. (2) To analyze new and existing study data to (a) identify factors influencing fathers' engagement in the HSP; (b) measure effects of home visitation on the father, and (c) relate paternal engagement in home visiting to program effects for the mother, child, and family as a whole.

**Principal Investigator:** Anne K. Duggan, Sc. D., Associate professor, 1620 McElderry Street, Room 202, Reed Hall, Johns Hopkins School of Medicine, Baltimore, MD 21205. Phone: (410) 955-8921; Fax: (410) 955-4367. Email: [aduggan@welchlink.welch.jhu.edu](mailto:aduggan@welchlink.welch.jhu.edu). **FY 98: \$184,242; FY 99: \$210,342**

**6. R40 MC 00110-02. American Indian Fatherhood in Two Oklahoma Communities**, a two-year investigation at the University of Oklahoma, will (1) interview native men and women about their views of what constitutes the role of a father and (2) investigate the community context in which native fathering roles are defined and communicated via participant observation and focus groups. The interviews and community investigations will occur in two native communities: one with a matrilineal tradition and the other with a patrilineal tradition. The two communities differ by their past history with the U.S. government such that one group has been able to retain strong traditions and have created a strong economic base while the other group has suffered more displacement and economic deprivation. Investigators argue that understanding how native men and women and their communities view the roles of fathers is crucial to our ability to provide meaningful services to these population groups. Delivery of appropriate services is especially a concern given the high rates of school failure, substance abuse, and suicide among native populations.

**Principal Investigator:** Lisa J. Lefler, Ph.D., Adjunct Assistant Professor, Health Promotion Programs, Bldg. #4, Suite 138, 555 E. Constitution Street, University of Oklahoma, Norman, OK 73072. Phone: (405) 325-1790; Fax: (405) 325-7126. Email: [llefler@ou.edu](mailto:llefler@ou.edu)  
**FY 98: \$154,395; FY 99: \$149,507**

**7. R40 MC 00111. Neighborhood and Family Effects on Adolescent Health Behaviors**, a three-year investigation, seeks to examine the relationships among neighborhood factors, family

characteristics and adolescent problem behaviors. The investigators propose to study both a national longitudinal data set (ADD HEALTH N: 700 7th and 8th grade students) and to interview a sample of families from Baltimore, MD (300 parent/adolescent pairs; 100 from 3 different neighborhoods). In both studies, the goal is to test models of adolescent problem behavior outcome as they are associated with neighborhood and family characteristics as well as adolescent's and parent's perceptions of those characteristics. The study argues that the national data set will allow for a large diverse sample whose outcome may be generalized widely. The local data set, however, will provide the ability to study more closely the processes by which different families negotiate and respond to neighborhood factors. The major dependent variables are onset of sexual intercourse and delinquency (fighting, stealing, etc.) Major independent variables will include Neighborhood characteristics (SES, Race, family structure); Neighborhood Resources(churches, clubs, health facilities) and Family characteristics (SES, Stability, Family Structure). In the Baltimore study neighborhood physical features (trash, social disorder, loitering) will also be measured as well as measuring ethnic identity among the youths. The study models also propose intervening variables such as parental involvement/attachment, behavioral control, perceptions of neighborhood and involvement with deviant peers.

**Principal Investigator:** Cheryl Alexander, Ph.D., Professor, The Johns Hopkins University, School of Hygiene and Public Health, Center for Adolescent Health Promotion and Disease Prevention, 2007 E. Monument Street, Baltimore, MD 21205. Phone: (410) 614-3953; Fax: (410) 614-3956. Email: [calexand@jhsp.edu](mailto:calexand@jhsp.edu). **FY 98: \$195,215; FY 99: \$241,678**

**8. R40 MC 00121. Adolescent Risk Adjustment: Diagnoses, Health Status, and Behavioral Risk**, a two-year study at the Institute of Child Health Policy of the University of Florida, proposes a comparative analyses of the effectiveness of five major diagnostic-based risk adjustment systems in predicting adolescents' (age 12 through 18 years of age) concurrent and future health care use and charges. Study subjects will come from 3 payer groups: Medicaid enrollees, low-income adolescents enrolled in a special health insurance program designed to provide coverage for children whose parents do not qualify for Medicaid and cannot afford private insurance, and commercially-insured adolescents. For the adolescents in each of these three groups, the study will apply the diagnostic-based risk adjustment models to the total group and to a subset of adolescents who have special health care needs.

**Principal Investigator:** Elizabeth A. Shenkman, Ph.D., Assistant Professor, Institute for Child Health Study, 5700 SW 34th Street, Suite 323, University of Florida, Gainesville, FL 32608. Phone: (352) 392-5904; Fax: (352) 392-8822. Email: [eas@ichp.edu](mailto: eas@ichp.edu). **FY 98: \$160,690; FY 99: \$141,165**

**9. R40 MC 00112. Adolescent Attitudes About Pregnancy**, a three-year study that proposes to develop a screening instrument that can identify those teens at greatest risk for becoming pregnant in the crucial months following a negative pregnancy test and to develop interventions targeted towards the specific factors which put them most at risk. The investigators make an excellent argument for not categorizing adolescents based on their pregnancy status, i.e., those who become pregnant and those

who do not. Some pregnancies, they argue, may have been contraceptive failures while some non-pregnant individuals may have been just lucky. They present evidence for questioning the assumptions that: (a) women can control their fertility, (b) all teenagers who become pregnant fail to use contraceptives consistently, and (c) all teenagers who do not become pregnant are either consistent contraceptors or abstiners. Much previous work they contend has failed to acknowledge that pregnancy may have significant benefit to the adolescent and many do not actually wish to avoid pregnancy. Thus, the need for a more appropriate screening tool as the ones now available do not specify the etiologic relationships between risk factors and outcomes.

**Principal Investigator:** Catherine Stevens-Simon, M.D., Associate Professor, The Children's Hospital, Box B025, 1056 East Nineteenth Avenue, Denver, CO 80218. Phone: (303) 961-6133; Fax: (303) 837-2729. Email: not available. **FY 98: \$129,107; FY 99: \$130,981**

**10. R40 MC 00109. Comprehensive Elementary School AIDS Education**, requests four years of support to investigate the effects of a randomized controlled trial of a prevention intervention program for AIDS education that is embedded within a social development program for elementary school children. The conceptual base driving the social development program is an amalgam of social cognitive and social influence theories. The study population will consist of 1,400 4th through 6th grade youths enrolled in bilingual and regular education classes within the New Haven, Connecticut school district. The study has an array of strengths: It is being implemented in a community where nearly twenty-five percent of all children are sexually active, includes youth with limited-English proficiency, involves multiple sectors of the New Haven community, and addresses an important public health problem (AIDS and Sexual activity.) Moreover, the preventive model guiding the study is developmental in its approach and addresses a variety of MCH research issues or priorities.

**Principal Investigator:** David J. Schonfeld, Ph.D., Associate Professor, Department of Pediatrics, Yale University School of Medicine, 333 Cedar Street, P. O. Box 208064, New Haven, CT 06520-806. Phone: (203) 737-2182; Fax: (203) 737-1366. Email: [david.schonfeld@yale.edu](mailto:david.schonfeld@yale.edu). **FY 98: \$383,001; FY 99: \$362,505**

**11 R40 MC 00116. Increasing Safety Seat Use Among Preschoolers**, a three-year study, seeks to implement and evaluate a comprehensive, scientifically validated passenger safety program aimed at children 2 through 5 years. The program is based on factors identified by parents of preschoolers to hinder or facilitate use of safety seats. The design is a pre-test-post-test control group study. Social Learning Theory and the Health Belief Model provide the theoretical framework driving the study. The parent component of the program is expected to increase parental competence to teach and reinforce safety behaviors with their children. The child component will teach children safe riding practices and encourage compliance with parental insistence on restraint use. Minority and economically disadvantaged families will be over-represented in the study to permit evaluation of the program within racial, ethnic and socioeconomic groups. If proven efficacious, the program is expected to be



disseminated nationally to preschools as an inexpensive, self-contained educational module, designed to decrease pediatric passenger death and injury.

**Principal Investigator:** Victor Franco Garcia, M.D., Director, Trauma Service, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati OH 45229-3039. Phone: (513) 636-7865; Fax: (513) 636-3827. Email: [garcvo@chmcc.org](mailto:garcvo@chmcc.org). **FY 98: \$241,731; FY 99: \$265,860**

### **NEW-FY 99**

**12. R40 MC 0013. EICS Phase IV: Adolescence.** This proposed four-year study is a continuation of the Early Intervention Collaborative Study (EICS) which has been following a sample of children with developmental delays or disabilities and their families since they entered early intervention programs in Massachusetts and New Hampshire between 1985 and 1991. Previous phases of this study have investigated the predictors and mediators of child development and family adaptation and have described the therapeutic, social, health, and educational services received by sample members. Data collection has occurred over five time points: at entrance to EI and one year later (Phase I), at age 3 and 5 years (Phase II), and at age 10 years (Phase III). Phase IV will examine the adolescent period, a critical developmental stage which has been virtually unstudied for individuals with disabilities. The broad project goals are to: (1) locate key points of change, and potential points of intervention, in the developmental trajectories of children and families between early childhood and adolescence; (2) focus on the differential impacts on maternal and paternal well-being and on the particular roles of fathers in parenting and adolescent with disabilities; and (3) examine the relation between adolescents with disabilities and the health care system. Data will be gathered through home-based interviewed and assessments and from teacher ratings of adolescents' social competence. Core social competence measures include two instruments that have been tracked through previous phases of EICS (adaptive skills and behavior problems) as well as additional measures of social connectiveness and autonomy/agency. Core family outcomes include measures of parenting stress (collected in all phases of EICS), psychological well-being, depressive symptoms, the quality of the parent-child relationship, and parenting competence. Hypotheses about predictors of change over time in adaptive behavior, behavior problems and parenting stress (including differences between mothers and fathers) will be tested using hierarchical linear models (HLM). Hypotheses about predictors of status during adolescence in peer acceptance, parent-child relationship, and the "goodness of fit" between the health care needs of adolescents and health care provision will also be tested. The findings will identify events, functioning, and aspects of the family environment at different time points that can distinguish those families and adolescents who are likely require a greater investment of health care and other program resources.

**Principal Investigator:** Penny Hauser-Cram, Ed.D., Developmental Psychology, School of Education, Boston College, Chestnut Hill, MA 02167-. Phone: (617) 552-8664. Fax: (617) 552-1981. E-mail: [hausercr@bc.edu](mailto:hausercr@bc.edu). **FY 99: \$225,191**



**13. R40 MC 00136. Prenatal Antecedents of Infant Outcome .** The objective of this study is to fully understand the ontogeny of development after birth and the origins of individual differences in behavior. The study uses recent technological advances in measuring fetal neurobehavioral development in utero. This prospective longitudinal project focuses on two questions: First, what is the validity of the fetal neurobehavioral measures in prediction of postnatal development and behavior? Infants from a current cohort assessed six times as fetuses will be followed at three ages (6 weeks, 12 and 18 months) and aspects of their motor development, sleep-wake cycles, temperament (including reactivity and regulatory capacities), and developmental outcome will be assessed. A second cohort of subjects, assessed three times as fetuses and now approaching five years of age, will be assessed for motor and intellectual functioning at 5 1/2 years. The second question involves the effect of maternal stress on development. Consistent data from animal, and some human, studies indicate that maternal prenatal psychologic stress impedes development in a variety of domains. During the fetal portion of the protocol, extensive measures of both maternally reported appraisal of daily stressors and actual physiologic responsiveness to challenge are collected, as well as mediating stress on infant development will be analyzed alone and in relation to alterations in fetal neurobehavior and maternal-child interaction. Results of this research have implications for both early detection of atypical development and the role of prenatal maternal stress as a potential developmental teratogen.

**Principal Investigator:** Janet A. DiPietro, Ph.D., Department of Maternal and Child Health, School of Public Health, The Johns Hopkins University, 624 N. Broadway, Baltimore, MD 21205-. Phone: (410) 955-8536. Fax:: (410) 955-2303. E-mail: [jdipietro@jhsph.edu](mailto:jdipietro@jhsph.edu). **FY 99: \$77,642**

**14. R40 MC 00137. Assessment of Enhanced Prenatal Care by Ethnically Diverse Women.** The general aims of this study are to determine whether enhanced perinatal services that include nutrition, psychosocial and health education services are associated with measurable benefits as perceived by women enrolled in Medicaid managed care plans, and whether those benefits differ for African-American, Hispanic and white (non-Hispanic) women . The specific aims of the study are to have African-American, Hispanic and white (non-Hispanic) pregnant women in Medicaid managed care plans assess their care in order to: 1) compare the quality of provider-patient interactions and of prenatal care advice given by providers who are certified to provide enhanced prenatal services and those who are not certified; 2) compare the outcomes of patient satisfaction and behavioral compliance with prenatal care advice given by providers; 3) determine whether any differences in outcomes are explained by differences in the quality of care; and 4) determine whether there are differences in the quality of enhanced prenatal care or outcomes assessed by ethnically diverse women. Study will develop and use a consumer survey instrument with reliable and validated measures for quality of interpersonal care, quality of prenatal care advice, patient satisfaction, and behavioral compliance with prenatal care advice. The findings of this study will be useful to policy-makers and Medicaid managed care plan officials in deciding whether to provide incentives for more prenatal care providers to become certified providers of the enhanced services, or to improve the way nutrition, psychosocial and health education services are provided to low income, ethnically diverse women.

**Principal Investigator:** Carol C. Korenbrot, Ph.D., Institute for Health Policy Studies, The Regents

of the University of California, San Francisco, 1388 Sutter Street, 11th Floor, San Francisco, CA 94109-. Phone: (415) 476-3094. Fax: (415) 476-0705. E-mail: [carol.korenbrot@quickmail.edu](mailto:carol.korenbrot@quickmail.edu)  
**FY 99: \$268,037**

**15. R40 MC 00138. Post-Traumatic Stress Disorder After Pediatric Traffic-Related Injury.**

The central hypotheses of the study are: 1: that the prevalence of psychological distress in children (including post-traumatic stress disorder, PTSD) after crashes is significant and warrants clinical attention; and 2: that those at risk for developing PTSD can be identified in the acute phase of care. In order to test these hypotheses, the study is to:

1. Determine the prevalence of PTSD in children which develops within 4 months after pediatric traffic-related injuries;
2. Determine the contribution of several specific risk factors (including parent PTSD) to the development of child PTSD within 4 months after traffic-related injuries; and
3. Develop and validate a PTSD risk assessment-screening tool for use in the acute care setting.

In order to fulfill these specific aims, the study uses the following methodology. A prospective cohort of children admitted to a Level 1 pediatric trauma center for treatment of traffic-related injury will be enrolled. In this cohort, the prevalence and development of PTSD in children post-injury will be examined. The underpinning of the analysis is a proposed theoretical model for the development of injury-related PTSD in children. Concurrently, using the same cohort, a clinically useful Brief PTSD Risk Assessment Tool will be developed and validated. It is envisioned that the Tool developed will be used in the acute care setting to identify those children and their families at risk for PTSD and who would benefit from further assessment and possible intervention.

**Principal Investigator:** Flaura Koplin Winston, M.D., Ph.D., General Pediatrics, The Children's Hospital of Philadelphia, Joseph Stokes Jr. Research Institute, 1 Abramson Building, 34th Street and Civic Center Boulevard, Philadelphia, PA 19104-4318. Phone: (215) 590-3118. Fax: (215) 590-5425. E-mail: [Flaura@mail.med.upenn.edu](mailto:Flaura@mail.med.upenn.edu). **FY 99: \$407,316**

**16. R40 MC 00142. An Intervention for the Transition to Fatherhood.** This is a three year randomized clinical trial of an intervention designed to increase father's involvement and improve fathers' relationships with their infants across the transition to parenthood. The transition to fatherhood is a life passage that sets the template for fathers' involvement with their children and the subsequent course of co-parental relationships with the mothers, and is therefore of critical importance to study. The study's main objective is to determine whether the intervention increases father involvement with children, enhances the quality of father-child relationships, promotes the co-parenting partnership, and decreases parenting stress. A total of 170 families (two-parent, expecting their first child) will be recruited from obstetrical clinics and randomly assigned to an educational intervention condition or a no

treatment control group. Couples will be recruited in the second trimester of pregnancy, and the intervention will be implemented across the pregnancy and the first six months after the birth of the child.

**Principal Investigator:** William J. Doherty, Ph.D., Department of Family Social Science, University of Minnesota, 290 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108-6140. Phone: (612) 625-4752. Fax: (612) 625-4227. E-mail: [bdoherty@che2.che.umn.edu](mailto:bdoherty@che2.che.umn.edu). **FY 99: \$344,470**

**17. R40 MC 00145. Predicting African American Children's School Competence.** This four-year investigation focuses on factors predicting and mediating the elementary school competence of a cohort of 75 African American children being studied since birth. The specific objectives of the study are to: 1) describe the developmental trajectory of African American children's language skills, social skills, and school competence from infancy through middle childhood; 2) determine the multiple predictors of school competence including academic achievement and school adjustment within an ecological model of child development; and 3) identify the extent to which children's social knowledge, social behavior, race specific and social coping strategies, language skills, and peer adjustment mediate the relationships between child, family, school, and neighborhood background factors and school competence. The proposed study broadens a current investigation by following children from third through fifth grade, examining the role of peer relations and racial identity, climate, centrality, coping strategies, and discrimination in children's school competence

**Principal Investigator:** Joanne E. Roberts, Ph.D., Child Development/Behavioral Science, University of North Carolina at Chapel Hill, 150 Smith Level Road, CB# 8180, Chapel Hill, NC 27599-8180. Phone: (919) 966-7164. Fax: (919) 966-7532. E-mail: [joanne\\_roberts@unc.edu](mailto:joanne_roberts@unc.edu). **FY 99: \$239,624**

**18. R40 MC 00161. Puerto Rican Young Fathers' Involvement with Their Children.** This multi-method, longitudinal, prospective study of mainland Puerto Rican adolescents and young adults will investigate the transition to fatherhood and the roles that fathers play in nurturing the health and development of their children. The investigators are to interview 300 Puerto Rican men between the ages of 18 and 26 who have experienced the birth of a child in the past year. They also propose to interview their children's mothers and to augment this interview with social and economic context information obtained at the municipality level of their communities of residence. While the young men will be the unit of analysis, data obtained from self-reports of the men will be triangulated with data obtained through interviews with the mothers about the father's involvement with their children and as well as community normative expectations about how fathers should relate to their children. The study addresses a number of MCHB research priorities, particularly the study of social context as the source of variation in the ways that fathers view their roles in the family, in their behaviors, and in the nature of the contributions they make to their families. All the data will be collected through face-to-face interviews with a bilingual/bicultural interviewer in the language of the interviewee's choice.

**Principal Investigator:** Sumru Erkut, Ph.D., Center for Research on Women, Wellesley College, 106 Central St., Wellesley, MA 02481. Phone: (781) 283-2533. Fax: (781) 283-2504. E-mail: [serkut@wellesley.edu](mailto:serkut@wellesley.edu). **FY 99: \$318,956**

**19. RO40 MC 00000. Responsiveness of CHIP to Children With Special Health Care Needs.** This three-year project seeks to examine the implications of how states structure their freestanding (non-Medicaid) CHIP programs for children's access to care generally, and for children with chronic illnesses and disabilities in particular. The overall focus of the study is the group of 25 states that as of April 1999 had HCFA approval to establish freestanding CHIP programs for some or all targeted children. Three within-studies are planned: (1) an in-depth descriptive study of eligibility criteria through analysis of primary source documents; (2) a series of comparative studies of benefit coverage and managed care design features through analysis of contracts between state CHIP/Medicaid agencies and managed care organizations; and (3) key informant interviews in a sample of 6 states. A fourth study will be conducted using data on commercial insurance (the prototype of CHIP) and Medicaid NHIS/MEPS and ARF data sets to test the probable effects of health care access and utilization for children of the state decisions to depart from the structure of Medicaid in their freestanding CHIP programs.

**Principal Investigation:** Sara Rosenbaum, JD, The George Washington University Medical Center, Ross Hall, Suite 712, 2300 Eye Street, N.W., Washington, D.C. 20037. Phone: (202) 530-2343. Fax: (202) 269-0025. E-mail: [resaxb@gwumc.edu](mailto:resaxb@gwumc.edu). **FY 99: \$252,743**

**20. RO40 MC 00162. Maternal PKU Resource Mothers Program,** a five year randomized trial to be conducted at the Children's Hospital of Boston, MA, will assess the feasibility and efficacy of a home visitation program designed to improve PKU metabolic control during pregnancy. Mothers of children with PKU (who are familiar with the special diet) will be trained to assist women with PKU who are preparing for pregnancy or who are already pregnant. Women who contact one of six metabolic treatment centers participating in the study will be randomly assigned to a group that receives Resource Mothers or a group that is treated according to the identical Maternal PKU Treatment Plan except that no Resource Mothers are involved. During the five years study it is expected that 115 mothers will become pregnant, of whom 72 will enroll and complete their pregnancies. The primary outcome variables to assess the effectiveness of the program will be the number of weeks from treatment initiation to maternal metabolic control, offspring birth measurements, and offspring development (DQ) at one year. Secondary analysis will be performed to assess the cost of the intervention and the ways in which the Resource Mothers program affects the course of treatment.

**Principal Investigator:** Susan E. Waisbren, Ph.D., IC Smith Building, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. Phone: (617) 355-7346. Fax: (617) 730-0461. E-mail: [Waisbren@al.tch.harvard.edu](mailto:Waisbren@al.tch.harvard.edu) **FY 99: \$38,029**

## **CONTINUATIONS**

**21. R40 MC 0009. Infants Environmental Tobacco Smoke (ETS) Exposure: Clinic-Based Maternal Counseling**, a four-year study at Center for Behavioral Epidemiology of San Diego State University, proposes an experimental study to test the effectiveness of maternal counseling provided in a well baby clinic in reducing environmental tobacco smoke in infants. The problem of infant exposure to ETS is a significant one; this exposure may be an etiologic factor in the higher respiratory disease of children who live in households with adults who smoke. An intervention to reduce ETS exposure that can be implemented as part of routine pediatric care may have widespread application and favorable results.

**Principal Investigator:** Melbourne F. Hovel, Ph.D., Professor, Center for Behavioral Epidemiology, San Diego State University, 7051 Alvarado Road, Suite B, La Mesa, CA 91941. Phone: (619) 505-4770. Fax (619) 505-8614. E-mail: [hovell@mail.sdsu.edu](mailto:hovell@mail.sdsu.edu) **FY 98: \$265,280; FY 99: \$230,792**

**.22. RO40 MC 00118. Interparental Conflict and Adolescence Violence**, a study to be conducted by the School of Medicine of the University of California-San Francisco, requests 3.75 years of additional funding to continue a currently funded project that is investigating the association between marital conflict and adolescent risk behaviors. The proposed research will use a cognitive/emotional theoretical model to examine how parental conflict influences adolescent peer violence, dating violence, and sexual aggression. Both violent behavior and victimization among adolescents will be studied. The theoretical model will be tested separately in 129 European American and 129 Mexican American families. Hypotheses for Mexican American families include cultural values relevant to family processes and violence. It is expected that results of the study will be immediately useful in developing primary and secondary prevention programs for parents and adolescents and in the development of prevention programs tailored to the needs of Mexican American families.

**Principal Investigator:** Jeanne Marie Tschann, Ph.D., Associate Professor, School of Medicine, CSBS-204, Box 0844, University of California-SF, San Francisco, CA 94143-0844. Phone:(415)476 - 7761. Fax: (415) 476 -7744. E-mail: [jmt@itsa.ucsf.edu](mailto:jmt@itsa.ucsf.edu) **FY-98: \$318,297; FY 99: \$363,021.**

**23. RO40 MC 00119. Crossing Cultural Boundaries**, a three-year study at the Department of Occupational Therapy, University of Southern California, seeks to examine how the problems of inner-city African American children with special health care needs are understood or culturally framed by their family members and health care practitioners. Specifically, the research questions explore the problems associated with misunderstandings and miscommunication between the family and the child's health care providers. The methodological approach of the study is ethnographic. Two major hypotheses will be explored by the study. The first states that difficulties in collaboration between families and health care providers is a major contributing factor to ineffective treatment of inner-city African American children with special health care needs. Investigators note that although family

members are often involved in initiating a referral or expressing concerns, their involvement in establishing the frame for the problem is often limited.® The second hypothesis states that poor collaborative relations derive from the different cultural world views to which the professional and family caregivers belong. Since African-American mothers often assume the role of culture broker, interpreting complex information and meanings for other family members, this study may shed further light on the complexities of the mother's role in negotiating family-centered care..

**Principal Investigator:** Cheryl Mattingly, Ph.D., Associate Professor, Department of Occupational Therapy, University of Southern California, 1540 Alcazar, CHP-133, Los Angeles, CA 90033. Phone:(323) 442 -2821. Fax:(323) 442 -1540. Email: [mattingl@hsc.edu](mailto:mattingl@hsc.edu) **FY 98: \$318,297; FY 99: \$235,430.**

**24. RO40 MC 00103. Home vs Group Visits After Early Postpartum Discharge,** a three-year randomized clinical trial at Kaiser Permanente in Oakland, California, will test the hypothesis that low-risk mothers and newborns will be at reduced risk of an adverse health outcome if assigned to receive a home visit rather than a group clinic visit on the third postpartum day following discharge from hospital. Group clinic visits are considered the way of the future as they are believed to be less costly than other services. However, there is limited evidence on their effectiveness. An adverse health outcome is defined by the study to include any of the following six events during the first 14 postpartum days: (1) An urgent clinic visit by the newborn; (2) an urgent clinic visit by the mother; (3) breast-feeding discontinuation; (4) maternal depressive symptoms; (5) rehospitalization of the newborn; or (6) rehospitalization of the mother. Generalizability of findings from the study is expected to be high as the clinical protocols are carefully specified and services will be delivered by the usual providers of a large health maintenance organization with an ethically and socioeconomically diverse patient population. **Support of the study is being shared between MCHB, the Center for the Future of Children, the Permanente Medical Group Innovation Program of Northern California, and the Garfield Memorial Fund.**

**Principal Investigator:** Gabriel Escobar, M.D., Division of Research, Kaiser Permanente, 3505 Broadway, Oakland, CA 94611-5714. Phone:(510) 450 - 2128. Fax:(510) 450 - 2071. Email: [gabriel.escobar@ncal.karperm.org](mailto:gabriel.escobar@ncal.karperm.org). **FY 98: \$ 233,970; FY 99: \$67,927.**

**25. RO40 MC 00120. Health Care Utilization: Pediatric Organ Transplantation,** a five-year study at the University of California- Los Angeles, seeks to identify pre-transplant family psychosocial factors predictive of increased medical and psychosocial health care utilization or poor functional outcomes. The study uses a longitudinal design, following a group of 150 pediatric patients ages 1-18 years at time of transplant who have received liver, heart, or kidney transplants. The study sample will be ethnically diverse with Hispanics (Mexicans immigrants, US-born Mexican Americans and Central American immigrants) comprising approximately one third of the total study participants. Data collection approaches and instruments have been selected to maximize validity and reliability within an ethnically diverse sample and translated and tested in Spanish using the forward-back translation



technique. It is anticipated that the study will produce the first research documentation of the pediatric organ transplantation experience of Hispanic children residing on the U.S. mainland.

**Principal Investigator:** Margaret L. Stuber, M.D., Associate Professor, Neuropsychiatric Institute, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, CA 90024-1759. Phone:(310) 825 - 5213. Fax:(310) 206 - 4446. Email: [mstuber@mednet.ucla.edu](mailto:mstuber@mednet.ucla.edu) **FY 98: \$148,566; FY 99: \$ 154,766.**

**26. FY-97. RO40 MC 00124. Psychosocial Sequelae of Bronchopulmonary Dysplasia and Very Low Birthweight,** a four-year study, at Case Western Reserve University School of Medicine, proposes to investigate the school-age outcomes associated with bronchopulmonary dysplasia (BPD), a chronic pulmonary disease associated with prematurity. The study will focus particularly on the influence of BPD on pulmonary, cognitive, language, neuropsychological, and behavioral outcomes at 7.5 years of age and relative to other medical, neurologic and sociodemographic risks factors. The study will use a cohort of 302 children (110 BPD, 80 very low birthweight (VLBW) without BPD, and 112 healthy, term). All of these children were prospectively, longitudinally followed from birth to 3 years of age through two separate studies funded by the Maternal and Child Health Bureau and the National Institute of Mental Health. Prior studies of this cohort to three years indicated that children with history of BPD had higher rates of mental/motor retardation, and performed significantly more poorly than very low birthweight children without BPD in both cognitive and motor outcomes. Motor outcomes were uniquely deficient for BPD children at 3 years, while very low birthweight children without BPD and term infants performed equally well. Poorer child outcomes were related to higher levels of depressive symptoms in mothers, and to less optimal maternal-child interactions in the first year of life, in addition to medical risk variables. **FY-97:\$348,250.**

**Principal Investigator:** Lynn Twarog Singer, Ph.D., Professor, School of Medicine, Case Western Reserve University, Rainbow Babies & Childrens Hospital, 11100 Euclid Avenue, Cleveland, OH 44106. Phone:(216) 844 - 6212. Fax:(216) 844 - 6233. E-mail: [lx55@pocWru.edu](mailto:lx55@pocWru.edu) **FY 98: \$ 343,185; FY 99: \$357,512.**

**27. RO40 MC 00001. Infant Temperament: Neonatal-5 Years in Rural Appalachia,** is a five-year study that will continue to follow a sample of children and families originally recruited for an MCHB-supported project having do with the poverty-related risks experienced by Appalachian children and families. Two research questions are addressed in this continuation study: 1) What continuity is there for certain temperament and mother-infant relationship qualities identified in infancy to preschool behavior problems and early school adjustment, and 2) If these children continue to show good functioning in the family context, then what is the trajectory leading to the 50% school dropout rate in this population? Results are expected to dispel stereotypes and provide the information needed to better understand both risk and protective factors in this research neglected cultural group, as well as what types of interventions might be inform the design of culturally relevant intervention programs .



**Principal Investigator:** Margaret Fish, Ph.D., Clinical Assistant Professor, Department of Family & Community Health, Marshall University School of Medicine, Huntington, WV 25755. . Phone:(304) 691- 1185. Fax:(304) 691-1153. E-mail: [fishm@marshall.edu](mailto:fishm@marshall.edu). **FY 1998: \$ 69,653; FY 99: \$73,733**

**28. R40 MC 00067. Role of Early Family Supports in Adult Self-Sufficiency**, a four-year study by the University of North Carolina at Chapel Hill, seeks to identify the ecological, personal, and situational factors associated with young adult ( Age:21 years)outcomes in subjects who had participated in the Abecedarian Project, a randomized clinical trial of early childhood intervention. The study provides a unique multi generational perspective on the effects of extensive family support (high quality, educational, child care, and free pediatric care in the early childhood years) on later life success of low-income African-American children and their parents. To date, significant positive effects of participating in the preschool intervention have been detected consistently for children from 18 months through 15 years, including prevention of mild mental retardation, increases in IQ scores, higher scores on academic achievement tests, lower rates of grade retention, and fewer placements into special education.

**Principal Investigator:** Frances A. Campbell, Ph.D., Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill, 105 Smith Level Road, CB#8180, Chapel Hill, NC 27599-8180. Phone:(919) 966-4529. Fax:(919) 966 -7532. E-mail: None **FY 98: \$205,338; FY 99: \$192,067.**

**29. RO40 MC 00095. Home Nursing to Avoid Pediatric Hospitalization**, a three-year randomized clinical trial to be conducted at the University of Rochester School of Medicine, will seek to evaluate a home nursing intervention program-Home Nursing Enhanced Primary Care (HNEPC). The program is designed to avoid hospitalization for common acute childhood illnesses. Specifically, the randomized trial will seek to determine: (1) The potential for implementation of HNEPC on a community wide basis; (2) acceptance of HNEPC by providers and families; (3) net impact of HNEPC on hospitalization rates; (4) estimates of cost savings; and (5) quality of care as measured by patient outcomes. **Funding is being shared equally by the MCHB and the National Institute for Nursing Research (NINR).**

**Principal Investigator:** Kenneth M. McConnochie, M.D., Associate Professor, Department of Pediatrics, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Box 777, Rochester, NY 14642. Phone:(716) 275 - 7813. Fax:(716) 256 - 1809. E-mail: [Kenmccconnochie@urmc.rochester.edu](mailto:Kenmccconnochie@urmc.rochester.edu) **FY 98: \$ 280,203; FY 99: \$167,564.**

**30. RO40 MC 00096. Alternatives for Developmental Screening in Primary Care**, a three-year randomized clinical trial to be conducted by the Medical and Health Research Association of New York City, Inc., a service and research arm of the New York City Department of Health, will examine the relative effectiveness of 3 different approaches to the periodic screening of at-risk children: (1)

Traditional provider-administered Denver II screening; (2) mailed Ages & Stages Questionnaire (ASQ); and (3) mailed ASQs plus monthly parenting newsletters and toys. Families with at-risk 3-18 month old children attending a pediatric primary care center in New York City and eligible for ICHAP (New York's PL99-57 Part H Child Find Program) will be offered enrollment into the study by their pediatrician. Those who accept will be randomized to one of the three arms of the study. The study will examine follow-up rates, the rate of positive screenings and the rate that at-risk children remain engaged in care for the three groups. Additionally, the degree to which income, maternal education, risk status and other factors predict outcomes within the three groups will be analyzed.

**Principal Investigator:** Harris Huberman, M.D., I-CHAP Medical Director, Medical and Health Research Association of New York City, Inc., 40 Worth Street, Room 728, New York, NY 10013. Phone:(212) 925-4217. Fax:(212) 925-5317. E-mail: none **FY 98: \$127,863; FY-99:\$ 127,873.**

**31. RO40 MC 00125. Factors Associated with Nutritional Intake in Adolescents**, a three-year study at the University of Minnesota, seeks to identify socio-environmental, personal, and behavioral factors associated with nutritional intake and weight status among adolescents, as outlined in the Year 2000 Nutrition Health Status and Risk Reduction Objectives. Findings are expected to lead to the development of more effective interventions aimed at improved eating behaviors among youth. The study will include three separate, but integrated, components: (1) Focus groups with 150 adolescents; (2) survey completion and anthropometric assessments of 5,500 adolescents in seventh and tenth grade; and (3) parental telephone interviews with 900 parents of the adolescent respondents.

**Principal Investigator:** Dianne Ruth Neumark-Sztainer, Ph.D., Assistant Professor, Division of Epidemiology, School of Public Health, University of Minnesota, 1300 South Second Street, Suite 300, Minneapolis, MN 55454-1015 . Phone: (612) 624-0880. Fax: (612) 6240315. Email: [neumark@epivax.epi.umn.edu](mailto:neumark@epivax.epi.umn.edu) **FY 98: \$ 269,702; FY 99: \$ 265,538**

**32. RO40 MC 00094. Satisfaction With And Utilization of Prenatal Care**, a three-year study at the University of Illinois-Chicago, will study the relationships between prenatal care characteristics and satisfaction and between satisfaction and subsequent prenatal care utilization . Study subjects are African-American women on Medicaid (n:295) and not on Medicaid (n:295) obtaining prenatal care at one of four health centers which are part of a large managed care organization-Humana Health Care Plan, Inc. The information gained from the proposed study is expected to help design interventions and develop policy changes so as to increase prenatal care utilization among pregnant women, particularly African Americans.

**Principal Investigator:** Arden S. Handler, Ph.D., Associate Professor, Prevention Research Center, University of Illinois at Chicago, 850 West Jackson Boulevard, Suite 400 M/C 275, Chicago, IL 60607. Phone:(312) 996-5954. Fax:(312) 996-3551. E-mail: [handler@uic.edu](mailto:handler@uic.edu) **FY 98: \$ 215,937; FY-99: \$177,254.**

**33. MCJ-240637. Evaluation of Hawaii Healthy Start Program,** a 5-year study is designed to provide a comprehensive process and outcome evaluation of Hawaii's Healthy Start Program (HSP), an established screening and outreach program for environmentally at-risk children and their families. In the HSP's Early Identification component, population-based screening and assessment are used to identify at-risk families of newborns. In the Home Visiting component, trained paraprofessionals provide direct support and education services to assure access to pediatric primary care and other community resources in the child's first 5 years of life.

**Principal Investigator:** Anne K. Duggan, Sc.D., Associate Professor, Department of Pediatrics, Johns Hopkins University Hospital, 600 N. Wolfe Street, C.M.S.C. #144, Baltimore, MD 21287-3144. Phone:(410) 614-0911. Fax:(410) 550-5440. E-mail: [aduggan@welchlink.welch.jhu.edu](mailto:aduggan@welchlink.welch.jhu.edu).  
**FY 98: \$ 107,746.**

**34. MCJ-240731. Poverty and the Ecology of African-American Children,** a three-year investigation at Johns Hopkins University, seeks to understand the ecological, situational, and cultural factors that shape behavior and set African-American children on certain developmental trajectories. The research has four aims: 1) to examine how differences in the physical and social characteristics of neighborhoods are related to differences in parenting among African-American parents across the spectrum of SES, 2) to examine how differences in the physical and social characteristics of neighborhoods directly and indirectly ( via effects of parenting) affect the developmental outcomes of African-American children across the spectrum of SES, 3) to identify the characteristics of neighborhoods and families that are related to increased resilience of African-American children living in poverty, and 4) to explore how the factors of culture, racial identity, and experiences of racial discrimination are associated with parenting and child development outcomes among African-Americans across SES.

**Principal Investigator:** Patricia J. O'Campo, Ph.D., Associate Professor, Department of Maternal and Child Health, Johns Hopkins University School of Hygiene and Public Health, 624 North Broadway Street, Baltimore, MD 21205. Phone:(410) 502-5448. Fax:(410)955-2303. E-mail: [pocampo@jhsph.edu](mailto:pocampo@jhsph.edu) **FY-98: \$192,897.**

**35. MCJ-249804. Preventing Mental Health Problems in Ill Children,** a four-year investigation at the Johns Hopkins University, seeks to implement and evaluate a 15-month parent-professional intervention to decrease the risk for mental illness in children with chronic diseases and their mothers. The proposed intervention will be delivered through a structured protocol by a team consisting of a child life professional and a Veteran parent (a parent who has raised a child with a chronic illness). The study's intervention giving protocol is designed so that it can be replicated in outpatient clinics serving children with any ongoing serious physical health condition.

**Principal Investigator:** Henry T. Ireys, Ph.D., Assistant Professor, Department of Maternal and Child Health, School of Hygiene and Public Health, Johns Hopkins University, 624 N. Broadway, Room

187, Hampton House, Baltimore, MD 21205 Phone:(410) 502-5442. Fax:(410) 955-2303. *E-mail:* [hireys@phnet.sph.jhu.edu](mailto:hireys@phnet.sph.jhu.edu) **FY 98:\$287,746.**

**36. MCJ-250643. Social Context of Puerto Rican Child Health and Growth**, a five-year study at Wellesley College, is a prospective, longitudinal study of healthy development in Puerto Rican children living on the U.S. mainland. The study examines the specific components of healthy development, including physical health, self-esteem, school performance, and behavioral adjustments. The project takes a comprehensive approach to the health and development of Puerto Rican children, including studying the effects of back-and-forth migration on developmental competencies, and does so with an orientation toward understanding the strengths of these children and their families.

**Principal Investigator:** Odette Alarcon, M.D., Research Associate, Wellesley College, Center for Research on Women, 106 Central Street, Wellesley, MA 02181 Phone:(617) 283-2460. Fax:(617) 283-3645. *E-mail:* [oalarcon@wellesley.edu](mailto:oalarcon@wellesley.edu) **FY 98: \$241,442.**

**37. RO40 MC 00046. Does Lead Burden Alter Neuropsychological Development?**, a five-year investigation to be conducted by researchers from the University of Minnesota School of Medicine, proposes to investigate the neuropsychological sequelae of lead poisoning in the first 4 years of life. The research is narrowly focused on measures of attention and memory in relation to age of first lead burden, magnitude of lead burden, and duration of lead burden. Established, as well as newly developed, instruments to measure neuropsychological, attention, and memory functions will be employed.

**Principal Investigator:** Elsa Gail Shapiro, Ph.D., Associate Professor, University of Minnesota Medical School, Box 486 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455. Phone:(612) 625-7466. Fax: (612) 625-7950. *E-mail:* [shapi004@maroon.tc.umn.edu](mailto:shapi004@maroon.tc.umn.edu) **FY 98: \$382,769; FY 99: \$258,415.**

**38. RO40 MC 00124. Does Education Limit Lead Burden?**, a five-year investigation at the University of Minnesota, is a community initiated randomized trial of an educational program designed to prevent elevated lead levels in low-income children living in the Phillips neighborhood of Minneapolis, Minnesota. The intervention uses community residents as peer teachers to implement a home visiting educational program on an individual basis and it is specifically tailored to the five ethnic communities which make up the Phillips neighborhood--African American, Native American, Caucasian, Southeast Asian, and Hispanic. **This study is funded jointly by the MCHB and CDC.**

**Principal Investigator:** Amos S. Deinard, M.D., Associate Professor, University of Minnesota School of Medicine, Box 85 UMHC, 420 Delaware Street, SE, Minneapolis, MN 55455. Phone:(612) 627-6888 X 201. Fax:(612) 627-4205. *E-mail:* [deina001@maroon.tc.umn.edu](mailto:deina001@maroon.tc.umn.edu) **FY 98: \$123,475; FY 99: \$ 178,599.**

**39. MCJ-270756. Prospective Investigation of Twin Gestation**, a three-year study by the University of Minnesota, addresses the role of diet in explaining the high rates of poor outcomes for twin pregnancies. Of the modifiable factors that potentially influence growth and development in twin fetuses, maternal nutrition is a logical choice for investigation. The study will focus on answering the following questions: 1) What are the characteristics of diets of women bearing twins? 2) Are caloric balance and/or nutrient density of maternal diets predictive of the birth weight or proportionate growth of twins? 3) Is timing of weight gain or total weight gain in twin gestation related to birth weight, low birth weight, or proportionate growth?, and 4) Does the gestational age of twins vary by maternal caloric balance or nutrient density of the diet?

**Principal Investigator:** Judith E. Brown, Ph.D., Professor, Division of Epidemiology, School of Public Health, University of Minnesota, 1300 South Second Street, Suite 300, Minneapolis, MN 55454-1015 Phone:(612) 626 -7934. Fax:(612) 624-0315. E-mail: [jbrown@epivax.epi.umn.edu](mailto:jbrown@epivax.epi.umn.edu).  
**FY 98: \$270,029.**

**40. MCJ-290740. Choices of Life for Adolescence Success (CLASS)**, a three-year extension of a study originally funded by MCHB, focuses on the important decision whether or not to continue in school from the perspective of a cohort of African-American adolescents. A major aim of the extension is to expand the original follow-up plan of the study through the completion of the senior year of high school. This will permit capturing a key outcome of interest, completing or not completing high school. The study is based on a known and previously validated theoretical model of rational decision-making, Ajzen's Theory of Planned Behavior (TPB)..

**Principal Investigator:** Larry Early Davis, Ph.D., Associate Professor, School of Social Work, Washington University, One Brookings Drive, St. Louis, MO 63130 Phone:(314) 935-6632. Fax:(314) 935-8511. E-mail: [larrid@gwbssw.Wustl.edu](mailto:larrid@gwbssw.Wustl.edu) **FY 98: \$20,439.**

**41. MCJ-360587. Improved Prenatal Detection of the Fragile X Mutation**, a five-year study, to be conducted by investigators from the Institute for Basic Research in Developmental Disabilities of the State of New York, proposes to develop a more reliable prenatal test to detect the fragile X than so far available. The fragile X syndrome, the most prevalent inherited form of mental retardation, is preventable by prenatal testing. Prenatal diagnosis is not yet widely available because the testing is technically difficult and not 100%. There is a growing demand for the type of test being proposed, and it could be offered by more genetic centers if better laboratory protocols could be established.

**Principal Investigator:** Edmund C. Jenkins, Ph.D., Chairman, Department of Cytogenetics, Institute for Basic Research in Developmental Disabilities, 1050 Forest Hill Road, Staten Island, NY 10314 Phone: (718) 494-5236. Fax:(718) 494-1026. E-mail: [Jenkinec@nysomer.emi](mailto:Jenkinec@nysomer.emi) **FY 98: \$120,879.**

**42. MCJ-360752. Effect on Breast-feeding of Pacifiers and Bottle Feeding**, a three-year study at University of Rochester, New York, seeks to evaluate the effects of artificial nipple exposure in breast-fed infants on the incidence of breast-feeding complications and breast feeding duration. The

study is designed to address one reason for poor continuation of breast feeding namely Nipple confusion brought about by early ( in the first few days of life) introduction of pacifiers and/or bottle feedings. The study is a randomized, single-blinded, trial with two arms. Arm 1 randomizes participating women to pacifier use within 2-5 days of birth; arm 2 , during the fifth week of life. Within these 2 groups, infants who require supplemental feedings will be randomly assigned to receive these feedings from a feeding bottle or a cup. Positive findings from this research would likely lead to a change in hospital practice and how parents are counseled about comforting their infants and, with these changes, a possible improvement in the duration of breast feeding.

**Principal Investigator:** Cynthia R. Howard, M.D., Assistant Professor, Rochester General Hospital, Department of Pediatrics, Box 238, 1425 Portland Avenue, Rochester, NY 14621 Phone:(716) 336-3926. Fax:(716) 336-3929. E-mail: [Choward@rghnet.edu](mailto:Choward@rghnet.edu) **FY 98: \$242,106.**

**43. MCJ-370649. African-American Children-s Transition to School**, a five-year project at the University of North Carolina at Chapel Hill, seeks to determine why African-American children of low-income status are at greater risk for cognitive failure upon entry into primary school. The study focuses on the social, psychological and biomedical liabilities of the children to be studied, as well as the issue of individual variability in outcomes and the observation that many children from disadvantaged backgrounds do remarkably well. The study also addresses an increasingly important environmental influence on cognitive development: the quality of extra familial child care.

**Principal Investigator:** Joanne Erwick Roberts, Ph.D., Research Associate Professor, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill, 105 Smith Level Road, CB#8180, Chapel Hill, NC 27599-8180 Phone:(919) 966-7164. Fax:(919) 966-3411. E-mail: [roberts.fpg@mhs.unc.edu](mailto:roberts.fpg@mhs.unc.edu) **FY 98: \$217,010.**

**44. MCJ-530640. Early Child Care Study of Children with Special Needs**, a five-year investigation at the University of Washington, seeks to examine the influence of variations in early child care histories on the development of children with disabilities or at high risk. The study has two primary aims: (1) to describe the natural history of alternate care usage in families with special-needs children; and (2) to test an ecological model investigating the ways in which child and family characteristics and the early intervention environment may moderate the effects of alternate care. Family and child characteristics are expected to influence the nature of the home environment experienced by the child as well as choices made concerning alternate care.

**Principal Investigator:** Cathryn L. Booth, Ph.D., Research Professor, Room 106-108 South Building WJ-10, University of Washington, Seattle, WA 98195 Phone:(206) 543-8074. Fax:(206) 543-4043. E-mail: [ibc@v.washington.edu](mailto:ibc@v.washington.edu) **FY 98: \$164,018.**

**45. MCH-97-56-97-00 (CONTRACT). Office Systems to Improve Preventive Care for Children**, a three-year randomized clinical trial, to be conducted by the Medical School of the University of North Carolina at Chapel Hill, adds an MCHB-supported anticipatory guidance



component to an ongoing Agency for Health Care Policy and Research(AHCPR)-supported intervention study that is designed to assist private pediatricians in adopting more organized ways of providing preventive services and patient education in their practices. In the AHCPR component of the study, the intervention will focus on four basic preventive services that are usually performed in the first year of life: immunization, and screening for anemia, tuberculosis, and lead poisoning. As secondary intervention targets, the study will now include several anticipatory guidance activities that are important to carry out in the first 15 months of life. These anticipatory guidance activities (herewith labeled the MCHB-funded component) are: use of car seat, use of smoke detector, ensuring appropriate hot water temperature at home, smoking cessation counseling, and ensuring adequate amounts of fluoride among infants over 6 months. **Funding is being shared by the MCHB and the Agency for Health Care Policy and Research.**

**Principal Investigator:** Peter A. Margolis, M.D., Ph.D., Clinical Associate professor, UNC Center for HPDP, 255 Rosenau Hall, CB#7400, UNC-Chapel Hill, Chapel Hill, NC 27599-7400.

Phone:(919) 966-2504. Fax:(919) 966-3852. E-mail: [margolis@med.unc.edu](mailto:margolis@med.unc.edu)

**FY 98: \$165,681; FY 99: \$65,815.**

**46. RO40 MC 00045. Improving Health/Development of Low Income Pregnant Women**, a three-year multi-center randomized controlled trial, seeks to assess the impact of a comprehensive prenatal and postpartum program on maternal and infant health outcomes in a low-income population. Women meeting all the inclusion criteria of the study and consenting to participate will receive either: (1) a nurse managed advocate-volunteer team intervention (intervention arm), or (2) the traditional prenatal care delivered by state entitlement maternal and infant support services (control arm). **This study is being supported by funds contributed y the Community Integrated Services Systems (CISS) Program of MCHB**

**Principal Investigator:** Lee Anne Roman, Ph.D., Co-Director of Prevention Outreach, Butterworth Health System, 100 Michigan NE, MC-94, Grand Rapids, MI 49503.

**FY 98: \$ 398,367; FY 99: \$ 159,241.** Phone:(616) 391-2627. Fax:(616) 391-3250. E-mail:

[Iroman@bw.brhn.org](mailto:Iroman@bw.brhn.org)

**47. RO 40 MC 00001 Reducing Preterm Birth by Bacterial Vaginosis Screening**, a four-year community-based intervention study by the Johns Hopkins University, is designed to reduce preterm low weight births by identifying and treating asymptomatic African American pregnant women with Bacterial Vaginosis (BV) . BV is a highly prevalent disorder, being present in up to 93% of non-pregnant and 58% of pregnant women. The main hypothesis driving the study is that pregnant African American women, presenting at a neighborhood prenatal care clinic without symptoms of BV, who are screened, confirmed to have BV and are treated, will have a lower incidence of preterm and low weight births than unscreened asymptomatic women. A four-period cross over, quasi-experimental design will be utilized in which all prenatal care clinics serving the Johns Hopkins University neighborhood of the City of Baltimore will have two sixth month periods during which they screen and treat all eligible, asymptomatic pregnant women for BV and another two six month periods during which they do not treat asymptomatic BV. The use of the quasi-experimental cross-over design permits the



implementation of a single protocol at each study site for a fixed period of time, thereby eliminating the community's concern that some women at the same study site will be denied treatment while other women will be treated. By introducing a cross-over design, each clinic can serve as its own control.

**This study is being supported by funds contributed by the Community Integrated Services Systems (CISS) Program of MCHB.**

**Principal Investigator:** David M. Paige, M.D., MPH, Professor, The Johns Hopkins University School of Hygiene and Public Health, Department of Maternal and Child Health, 624 North Broadway, Baltimore, MD 21205 Phone:(410) 955-3804. Fax:(410) 614-9042. E-mail: [dp Paige@welchlink.welch.jhu.edu](mailto:dp Paige@welchlink.welch.jhu.edu) **FY 98: \$266,293; FY 99: \$ 266,293.**

**48. MCJ-420832. Predicting the Need for Hospitalization in Childhood Asthma**, a prospective, two-year study, to be conducted at the Children's Hospital of the University of Pennsylvania School of Medicine, proposes to develop and validate an actuarial rule to differentiate children who present to an emergency room (ER) with acute asthma and are capable of being discharged following treatment from those who need additional hospitalization. The investigators argue that given changes in medical treatment and the development of more effective clinical tools, the time is ripe for re-evaluating the possibility of developing an effective actuarial rule for making hospitalizations in children asthma cases. Benefits likely to derive from the availability and use of such an actuarial rule are savings in inappropriate care and increases in the quality of life and functional health of children. Seven hundred and eighty children(780) age two years and up will participate in the study. All children will be given an standardized treatment according to national guidelines and will be discharged or admitted as a result of clinical judgements based on national standards. **This study is being supported by funds contributed by the Pediatric Emergency Medical Services Program of MCHB.**

**Principal Investigator:** Mark Gorelick, M.D., Assistant Professor, Department of Pediatrics, University of Pennsylvania School of Medicine, Center for Clinical Epidemiology and Biostatistics, 712 Blockley Hall, 423 Guardian Drive, Philadelphia, PA 19104-6021. Phone:(215) 590-1620. Fax:(215) 590-4454. E-mail: [gorelick@cceb.med.upenn.edu](mailto:gorelick@cceb.med.upenn.edu) **FY 98: \$ 283,152.**

**49. RO40 MC 00122.. Three-generation Intervention Among Adolescent Mothers**, a five-year study at the University of Maryland School of Medicine in Baltimore, Maryland, will conduct a randomized trial of an intervention aimed at adolescent mothers rearing their infants in family contexts where grandmothers are present. Most interventions focusing on adolescent parents have focused on the adolescent mother, ignoring the relationship between the adolescent and her own mother. Yet, grandparents are often central figures, organizing the family, supporting the adolescent, and sometimes assuming the role of primary care giver for the infant. All adolescent mothers participating in the study will be of African-American origin.

**Principal Investigator:** Maureen Black, Ph.D., Professor, Department of Pediatrics, University of Maryland School of Medicine, 700 W. Lombard Street, Baltimore, MD. Phone:(410) 706-5289. Fax:(410) 706-0653. E-mail: [mblack@pediatrics.ab.umd.edu](mailto:mblack@pediatrics.ab.umd.edu)

**FY 98: \$ 233,129; FY 98: \$199,426.**